



Centre for Bioscience Representatives were invited to the 2010 Forum to share and discuss current ideas and learning and teaching issues in bioscience higher education.



Give It A Go! Included in the report are some suggested strategies which might assist you in your role as a Rep. Some of these involve Web 2.0 tools. You can find out more about using the Web 2.0 tools the Centre has adopted at www.bioscience.heacademy.ac.uk/events/leicester161209.aspx and view the Centre's Delicious Web2.0 collection at www.delicious.com/heabiotutor/web2.0

What Reps had to say about the Forum:

'Inspiring ideas and a network of great colleagues.'

'Excellent snippets with lots of useful and interesting ideas to take home.'

'Good opportunity to inspire and be inspired.'

Tuesday, 14th September 2010

Welcome and introductions to the forum

David Adams, UK Centre for Bioscience Director, opened the Forum with a look at the Centre's current focus and our work within the 'current climate.'



Ice Breaker and Poster rounds

As a starting activity Reps were asked by Sheryl to find 'the Rep who....' in order to determine who their partner was. Then the

groups of two or three Reps each independently viewed and together discussed two posters. The posters were grouped on four themes: Reward/Recognition and Promotion; Learning & Teaching; Technology in Learning & Teaching; and Student Engagement. (Many of you stated that time did not permit for viewing of posters outside your theme. To view the posters you can follow a link from each poster within this report, go to the event web page:

www.bioscience.heacademy.ac.uk/events/repforum10.aspx or view them within the Centre's Slideshare account at www.slideshare.net/search/slideshow?searchfrom=header&q=heabio).



Give It A Go! Consider sharing your own materials on Slideshare (www.slideshare.net/) or with a similar Web 2.0 tool or with the OER network (www.bioscience.heacademy.ac.uk/resources/oer/index.aspx).

Small group activities

After lunch, Steve outlined how the earlier discussions between partners on their posters were to be shared across each of the larger thematic groups. Each group was then tasked to develop a way to share the outcomes/concerns across the theme in a five minute 'pitch' with all Reps. Julian led the four themed groups as they shared back their discussions and findings.



REWARD/RECOGNITION & PROMOTION GROUP:

(Richard Bevan, Nicholas Freestone, Julia Lodge, Stephen McClean, Damian Parry, Anya Perera, Gillian Shine, & Dave Skingsley)

Stephen's group presented a short skit/play (with masks!) involving two imaginary departmental events which was narrated by Richard:

1) A Job Interview to fill the new post in 'Chair in Agricultural Research XYZ'

- Dr. Committee Chair – always talking about rules
- Dr. You Have Been Here for Years – been here for years
- Dr. In Next Office - Didn't know you were invited
- Dr. I Remember You – you did your PhD here; a nice young face in the dept; nice and cheap
- Dr. Over worked & Over looked – you are just an aide aren't you?
- Dr. Shiny New Face – recently promoted outside our institution; will bring new ideas to the department – therefore we give the job to you



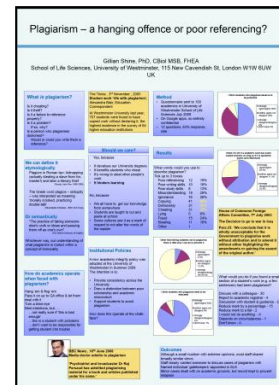
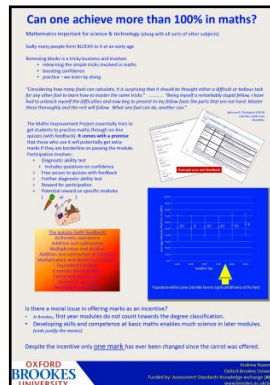
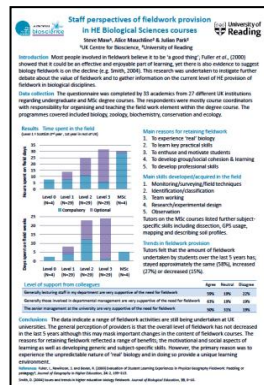
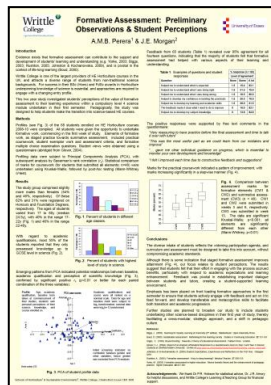
2) A Staff Meeting

- Dr. Committee Chair → Congratulations for your understanding and ability to provide us with information on the assessment rules
- Dr. You Have Been Here for Years → The teaching surveys have been great in part due to you having brought your experience to the department
- Dr. In Next Office → always next door and provide advise whenever I need anything and helpful
- Dr. I Remember You → a new post available as they have been redundant
- Dr. Over worked & Overlooked → spare post here also - has moved on
- Dr. Shiny New Face → will have to give this work to that new post – where is he? Oh, he is now just another lecturer

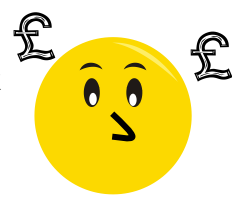
The group's intent was to show that departments often overlook the wealth of talent they have within their own institution/group and it is often easier to get promoted outside an institution than within your institution.

TEACHING & LEARNING GROUP:

(Alan Cann, Iain Coleman, Beatrix Fahnert, Kevan Gartland, Brian Martin, Charlie McDonald, Andrew Rosenthal, Graham Scott, Richard Stafford, & Christine Wells)

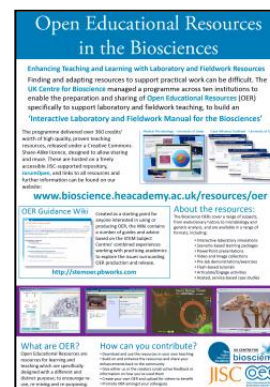
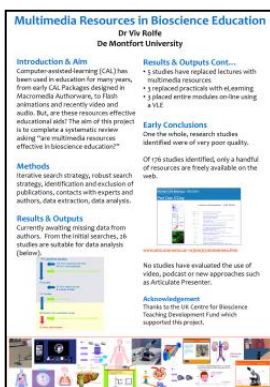


Graham's group started with a drawing of a mouthless face to represent the group's realisation that a lack of communication between students & tutors was a common theme to emerge across the posters on fieldwork, key skills, formative work, maths, & feed forward and feedback. They also found that student perception of a good thing/experience provided them with an opportunity to talk to their tutors while student perception of a bad thing/experience tended not to provide students with the opportunities they wanted to talk to their tutors. The group also realised that the amount of conversations between tutors and students has declined and we often don't have the right kinds of conversations. Increased financial pressures have put constraints on speaking to one another.



TECHNOLOGY IN TEACHING & LEARNING GROUP:

(Merryn Ekberg, Momna Hejmadi, Peter Klappa, Dave Lewis, Vivien Rolfe, Jon Scott, Carol Wakeford, & Kay Yeoman)



Viv's group presented two short pitches by Dave & Peter to the Dragon's Den.

Lecture/Student produced materials: (Dave)


'I am the communist who believes that we should share the resources and my friend over there wants to sell everything. Okay, so why should we share? Why reinvent the wheel? There are lots of good resources out there why don't we use them? More importantly it saves a lot of money and time. From the student's perspective it encourages flexible learning; it allows them to learn at their own pace; it

gives them greater ownership of their own learning; there are some great products out there so why not use them? E-projects, for example. One of the issues with sharing are those to do with IP. But if we share, we don't have to worry about IP; if we share we don't have to worry about all of the red tape and other hurdles, we just share amongst our colleagues. Think again about students who want flashy resources. Let the students develop these resources to then share with others; we cannot all be experts, let the experts develop what they are good at and then choose their materials. At the end of the day we have a great network of colleagues at the Centre for Bioscience. We need to use the Centre for Bioscience where we can gather resources and share with one another to benefit our own teaching and our students' learning.'

Business Proposition: (Peter)

'Dear Dragons, I am here to convince you to invest £200,000 to our company Spectacular Science, a small company working with software developers and CGI people along with bioscientists to develop software. We develop the software suitable for students and teaching. It is bespoke and expensive. Professional site license for Maya the animation programme is £2.5K/year and could do fantastic stuff. The amount of time /effort to do this requires us to recoup our initial investments – which universities like to do selling across the sector to earn cash in these business adventures. We want to provide you with excellence. You don't have to do anything – you tell us what you want and we make it – you don't have to buy any software – it isn't prohibitively expensive. Can I convince you [to invest] in a 10% share in Spectacular Science?'

With a show of hands the delegates overwhelmingly opted for the openly shared set of resources over the business model proposed. There was further discussion of the need to include recognition and reward (financial or professional) for academically developed materials. For further discussion on this see Alan's blog http://scienceoftheinvisible.blogspot.com/2010/09/my-mini-rant-about-oers-at-reps10.html#disqus_thread You might also be interested in the OER project and shared resources available to you. See www.bioscience.heacademy.ac.uk/resources/oer/index.aspx for more information.



Give It A Go! There were a few Reps who blogged about the #Reps10 event. Do you have a blog? Please share your activity with us, so that we can share your blogs with other interested colleagues. Also consider blogging about a recent Centre activity, event or other interaction which might be of interest to others. For example see <http://planetchemistry.wordpress.com/2010/09/15/text-messaging-in-higher-education-project-140/> where Stephen blogged about his participation in the forum which highlighted his poster contribution.

STUDENT ENGAGEMENT GROUP:

(Andy Bates, Jane Hoole, Donald Palmer, Julian Park, Rosanna Robinson, Kath Shennan, Anne Tierney, Ian Turner)

Moving Forward Through Feedback: Can the Use of Video Enhance Feedback Provision?

This poster discusses the use of video in providing feedback. It includes a table with columns for 'Why Use Video?', 'Benefits', and 'Challenges'. A pie chart shows the distribution of feedback types: 'Written' (45%), 'Verbal' (35%), and 'Video' (20%).

Student Engagement in the Biosciences

The UK Centre for Bioscience takes an active role in developing and promoting student engagement within its communities, and is involved in a number of related initiatives that span all levels of higher education. You can see an overview here, and full details are available on our website: www.bioscience.heacademy.ac.uk/news/2009/09/09

Dimensions of student engagement

- Individual Learning:** Focuses on the individual student's experience and learning outcomes.
- Curriculum Design and Delivery:** Involves students in the design and delivery of the curriculum.
- Discipline Level:** Focuses on engagement within a specific discipline.
- School / Department Level:** Focuses on engagement at the level of the school or department.
- Institutional Level:** Focuses on engagement across the entire institution.
- UK Policy Level:** Focuses on engagement at the national policy level.
- Bioscience Student Pages:** Provides resources and information for bioscience students.

Harnessing Social Scaffolding For Education

This poster explores the concept of social scaffolding in education. It includes a diagram showing the relationship between 'Social Scaffolding' and 'Learning Outcomes'. It also lists key findings and implications for practice.

Teaching in the Biosciences: An Introduction for postgraduates and postdoctoral fellows

This poster provides an introduction to teaching in the biosciences. It includes a table with columns for 'The Future' and 'The Present'. A quote from a participant reads: "Bogged my confidence in teaching. I just wish that I had heard about the UK Centre for Bioscience several years ago."

Anne's group looked at Student Engagement and found part of the problem was finding ways of engaging, including getting other staff to engage. Therefore as a group, each Rep has decided to volunteer to find one way to get students or staff more engaged:



- Student Course evaluation: Encourage students to get more involved in course evaluation; students were more involved in the course when given rapid feedback; students value the increased involvement in the process and were found to like to be involved in course evaluation if it is part of the assessed work. A part of this will be to set the course evaluation as part of her student's assessed work.
- Video feedback to students – will give that a go and if successful will share with colleagues to encourage them to also use this approach.
- Student Centred Learning – problem based learning groups where they learn everything around a problem and feedback with the group – will try to do some modules with this practice on their course.
- Student Developed Teaching Materials – some Final Year Practical student projects produce resources for schools; give some thought to having students involved in developing materials for their own learning or towards future groups.
- Talk less; demonstrate more - to share with colleagues different assessment strategies.
- Centre Bulletins – share any developments from the Centre in person with one's colleagues. This is especially important as many departments are losing the departmental coffee rooms and a loss of informal social meetings.

Take-home message: We need to be engaged if we want our students to be engaged. One way to increase our engagement is through the use of technology to bring staff and students together.



Give It A Go! Consider using Twitter to broadcast and share with your colleagues the latest information from the Centre. You can join Twitter <http://twitter.com/> and follow the Centre http://twitter.com/hea_bio (and the Centre's followers) as well as use the tool to share news, updates, and other information with your colleagues.

Celebration of teaching and learning: Centre's 2010 Teaching Awards

To start our showcase of teaching and learning, Jackie provided a brief overview of the evolution of the Centre's Teaching Awards over the past two years. The application process and benefits from past shortlisted candidates were also shared with the Reps. For more information on the Teaching Awards, now the Bioscience Teacher of the Year co-sponsored by Oxford University Press, please visit: www.bioscience.heacademy.ac.uk/funding/recognition/award.aspx and for a list of finalists and their case studies visit www.bioscience.heacademy.ac.uk/funding/recognition/finalists.aspx

Each of the 2010 shortlisted candidates provided an overview of their own experiences with applying for the award, the development of their teaching practices highlighted in their respective case study, and their overall experiences with the process.

Stephen McClean, University of Ulster

'USING REFLECTIVE VIDEO SHARING IN YEAR ONE CHEMISTRY LABORATORY SESSIONS' (Stephen's case study can be viewed at www.bioscience.heacademy.ac.uk/ftp/teachaward/mcclean.pdf)



Stephen began by sharing his motivations for applying for the award. He viewed the application and case study process as a way to externally evaluate his teaching and to reflect personally about his work. He had many reasons behind the development of his Reflective Sharing in Videos for his students: a very diverse student population (he phrased it as 'edu-diversity'); to create/increase student engagement and reflective practices in the lab practical; and examine relevance of chemistry in the degree programmes. The work initially started after attending the 2007 Rep's Forum and hearing Phil Langton's talk 'Use of automated on-line quizzes as a means to engage and motivate students to

prepare in advance of laboratory practical work'

www.bioscience.heacademy.ac.uk/ftp/events/repforum07/langton.pdf Further development of the lab practical through the starting of the YouTestTube project occurred after reading the 'The Student View of 1st year Laboratory Work in Biosciences' report (Collis, et al., 2007), which can be viewed at www.bioscience.heacademy.ac.uk/ftp/reports/1styearlabs.pdf.

Following Stephen's presentation there was discussion surrounding the academic gains for students which haven't been documented as of yet; moderation of comments on the social networking site which is monitored by the software package; concern over the video element possibly taking over the practical experience and impeding actual learning (which doesn't happen); whether students have been able to watch past year's videos (this hasn't happened to date but emerged as a request from students interviewed as part of the Award process and will occur in the future). There was a question about the number of cameras required; 4 cameras were used by the randomly assigned students.

Graham Scott, University of Hull

'STUDENT MANAGED LEARNING: WHALES, DOLPHINS, AND SHARKS' (Graham's case study can be found at www.bioscience.heacademy.ac.uk/ftp/teachaward/scott.pdf)

Graham's motivation for developing a student managed learning experience around a popular subject was to harness the students' enthusiasm for marine animals in a fieldwork setting. He shared the series of events which led up to his teaching this particular module in a less traditional manner. He then described the activities designed to engage students on topics of interest to them but through student-led and managed activities; methods which are unfamiliar and outside of their comfort zone. Throughout all of these activities is a very strong element of self and peer assessment. In his reflection he pointed out the process was about recognition and validation but more importantly it started conversations with peers both regionally and nationally.



Reps were interested in understanding the types of students in the module. Graham reported that students were self selected to go on the module and were from mixed social groups. Interestingly the students liking the module the least were the high achievers - he believes due to issues with these students not wanting to give up the control of learning and being assessed in a group setting. It was suggested that using peer evaluations would help to adjust the marks given and if one mark was assigned to the group as a whole this levels the lower and upper achievers. Discussions on when is the best time to have students experience this type of learning were had with many thinking it needed to be for final year students only while students many times express that they wanted this experience earlier.

Anne Margaret Tierney, University of Glasgow

'IMPACT OF REFLECTIVE DIARIES ON WIDER ISSUES OF LEARNING' (Anne's case study can be read at www.bioscience.heacademy.ac.uk/ftp/teachaward/tierney.pdf)

Anne's teaching award case study was developed with Julian working on behalf of the Centre and using technology to meet up with Anne and her students. Anne appreciated the opportunity to have an outsider's perspective to evaluate the project. She shared her reasons for inclusion of diaries within an existing course, Business & Bioscience, to monitor how students were doing within the first two weeks of intensive coursework. A sense of community developed among the group of students when students accidentally viewed files meant to be private. Anne now uses the diaries as a source of feedback and to challenge students further on their academic pursuits.



There were follow up discussions on how to handle the student reluctant to participate along with use and value of reflective activities. The ethics of mandating students to personally reflect was talked about and further suggestions were to maintain the reflective aspect by stating how work is going and what could be done differently. Other Reps commented that in their experience uptake of PDPs was greater in later years of study.

Wine reception & Centre poster display

Reps returned to Birchwood House for wine, another look at the posters and a bit of an impromptu piano recital thanks to a University of Cardiff student practicing for an upcoming wedding.



Ed Wood Teaching Award 2010 presentation



Following dinner, Kevan Gartland presented each of the Teaching Award finalists with a certificate and the overall winner, Graham Scott with a trophy and bottle of champagne. Terry provided additional entertainment for the Reps acting as quizmaster for the a quiz based on aspects of Life in the UK immigration test and a picture round involving identification of mostly UK- based trademarks and logos.

Wednesday 15th September

Swapshop session

Katherine chaired this session, which involved a series of talks volunteered by the Reps in which they shared work on teaching and learning, discussed outcomes and sought comments from the audience.

'Home from home: video diaries from the 2nd years' was shared by **Jon Scott**, as a continuation of the rich resource of student experiences from First Year students. Both of these collections illustrate the non-linear, fragmented aspects which exist in transition across the whole university experience. Discussions following the talk were focussed on reluctance to participate, how analysis occurs (which is handled by external researchers), and the ethics behind any interventions.



Nicholas Freestone developed the activities which formed the basis for his presentation, **'Differentiated learning: the Kingston MPharm experience,'** after having attended our Differentiated Learning Forum: Stretching able students event in June 2007 www.bioscience.heacademy.ac.uk/events/dlforum07.aspx. Nick shared his experiences to date of working with 2 different scenarios (self-selected top 10% group and a mixed ability group) to target the differentiated learners and with varying achievement results. Work is on-going.



'Lonely hearts columns - A novel way of teaching students abstract writing skills' was presented by **Ian Turner** as an Interactive Swapshop. He asked Reps to participate in a 'reverse abstract' journal article activity using the lonely hearts newspaper advertisements and write a similar ad about a famous scientist. He illustrated how this approach could be applied to a scientific paper to produce a scientific abstract, preferably one that isn't available on-line to avoid plagiarism issues. Discussion followed around getting the very serious students to step outside strict academic activities in order to appreciate the value and experiences with these activities.

Dave Lewis shared the diverse possibilities with **'Using short video clips to promote the discussion of ethical issues in science'** in his presentation. Through a collection of video clips which can be historical, relevant, or news/topical in nature we can help to provide students with a better understanding of differing perspectives on ethical issues. Various video sources were shared such as charities and lobby groups, and BoB (Box of Broadcasts <http://bobnational.net/>).

Iain Coleman provided a conundrum of sorts about the implementation of an institutional Blended Learning strategy at the University of Wolverhampton in which students are entitled to an electronic assessment of their work. In his presentation, **'Does a spoonful of dictation sugar help the electronic marking medicine go down?'** Iain set out to determine the possibilities and logistics around meeting this entitlement. He described the climate and resistances in the project as well as the technological limitations. Initial feedback from students and faculty was positive but the next step of involving everyone in providing electronic feedback as an elective choice will be hard to do. A pilot with dictation software, Naturally Speaking 10, was begun and the outcomes reviewed. Overall it worked very well but also included a few typical downsides found with other electronic assessment programmes. He concluded by asking for any suggestions. Responses were: the greater the number of papers to mark the greater the limitations of electronic marking systems; combine common feedback into one document to send to all; and use Audio Notes in Microsoft Word (not always in the Office suite purchased though).

In his presentation of **'Teaching with animations'**, **Peter Klappa** presented three different types of animations and utilities which he uses to promote learning and teaching. The basic option is Lecture Scribe which can be recorded and uploaded to VLEs; more involved animations involve PowerPoint annotations to include animations created with Camstudio; and the most complex is professional production using an expert developer (in his example, a Year 1 art student). Other options shared were slideshare.net and recording of screen shots.

'Ask the Centre' Panel

Jon led the Reps through an activity to examine the work of the Centre and its future focus. Reps had been asked to read both the 'Centre News' and the '10 Year Celebration' documents to generate a list of activities for the Centre to Stop, Carry-on or to Start. From their lists, groups of Reps were to generate a series of questions to ask the Centre and promote discussions toward our future work and focus.



A summary of these discussions can be found on the event webpage at www.bioscience.heacademy.ac.uk/events/repforum10.aspx.

Reflections on the Forum

Donald reflected on the events over the 24 hour period through an entertaining and uplifting recap. Many thanks, Daniel!



Closing remarks

David Adams brought the Forum to an end reminding the Reps of their importance to the Centre, and our gratitude for their input, participation and enthusiasm as Centre Reps.

This report of the event including all presentations is available on the UK Centre for Bioscience website (www.bioscience.heacademy.ac.uk/events/repforum10.aspx).